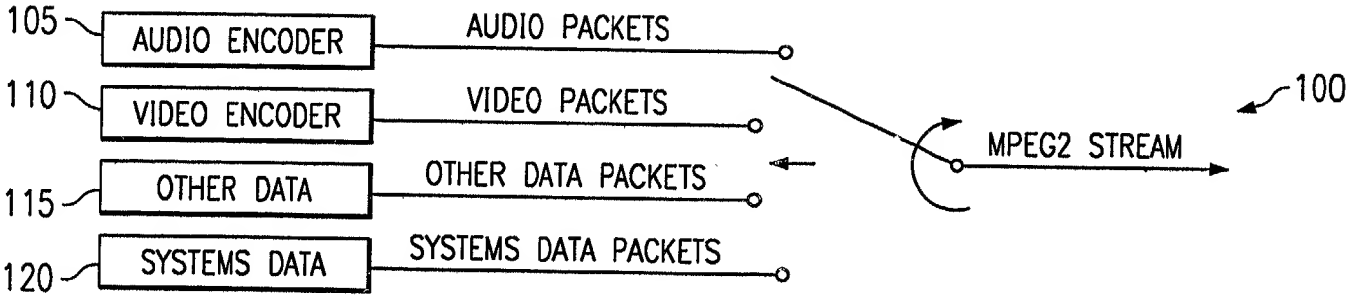


FIG. 1
(PRIOR ART)

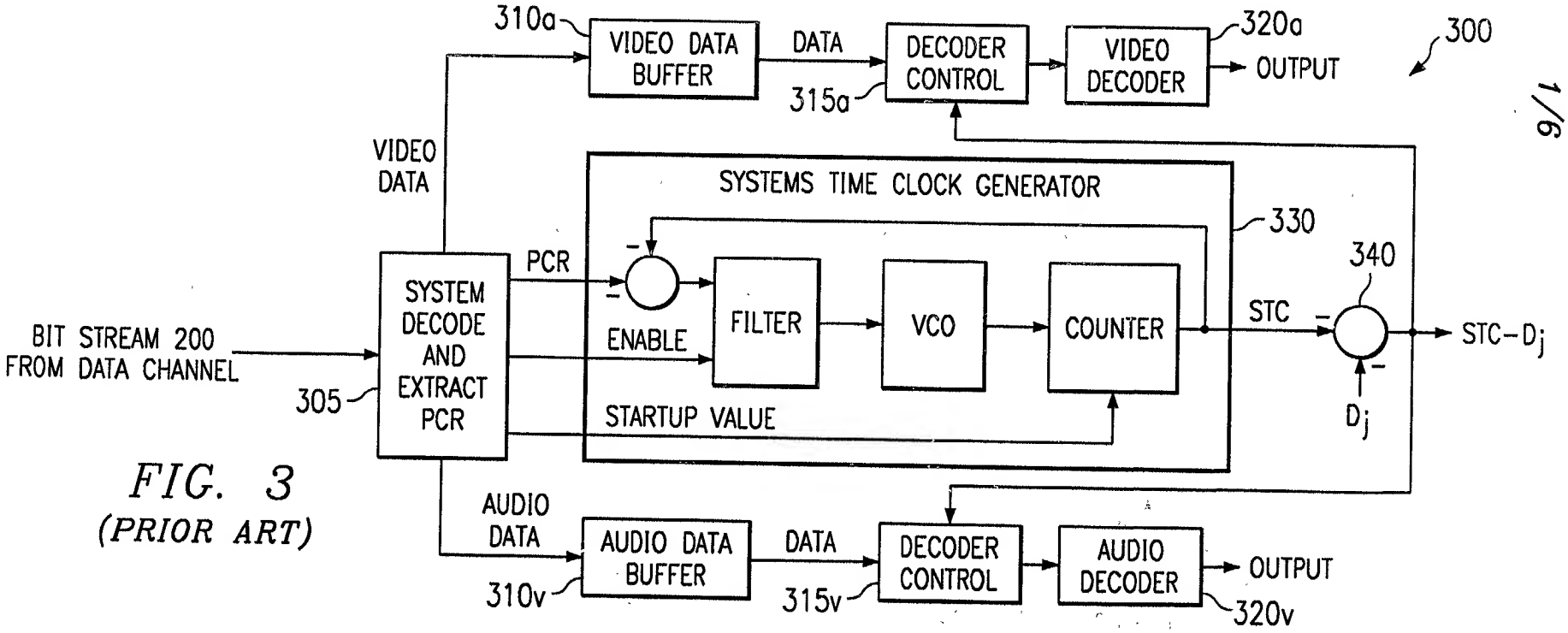
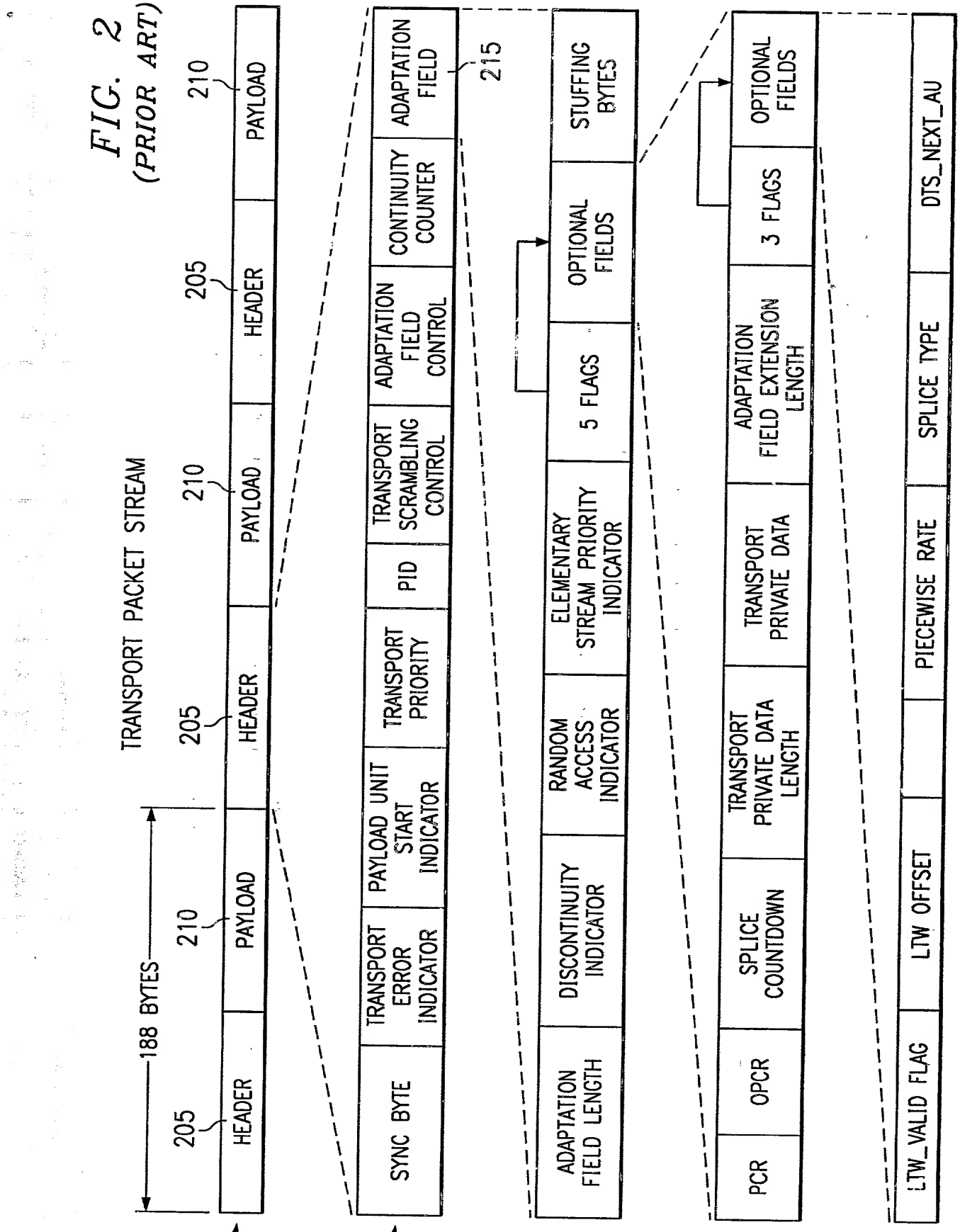


FIG. 3
(PRIOR ART)

FIG. 2
(PRIOR ART)



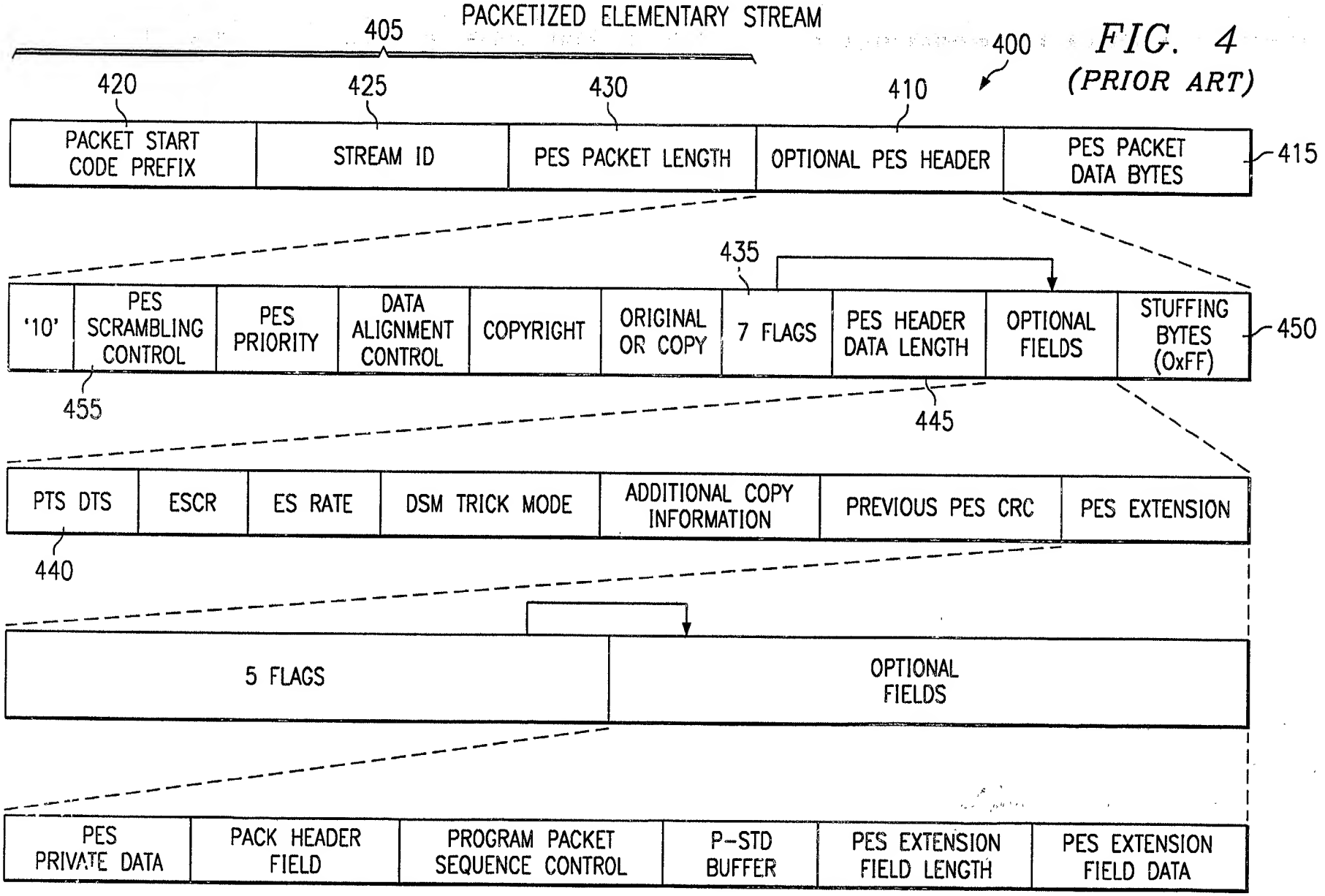


FIG. 4
(PRIOR ART)

FIG. 5
(PRIOR ART)

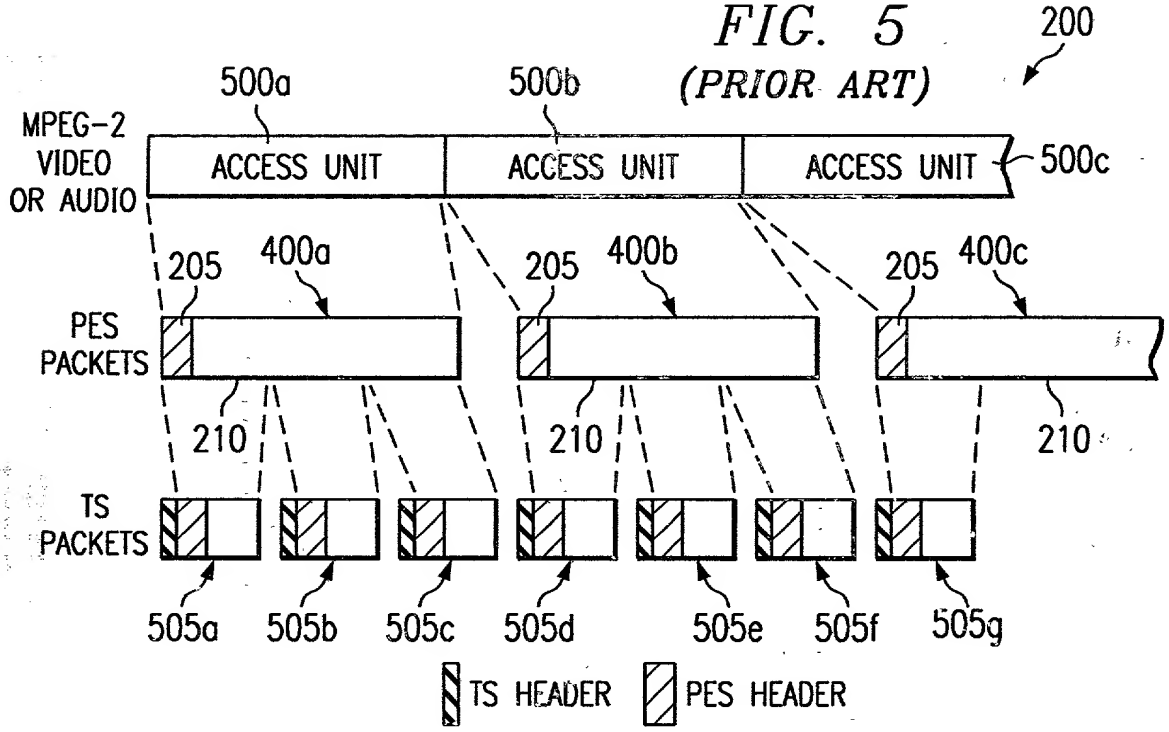


FIG. 6

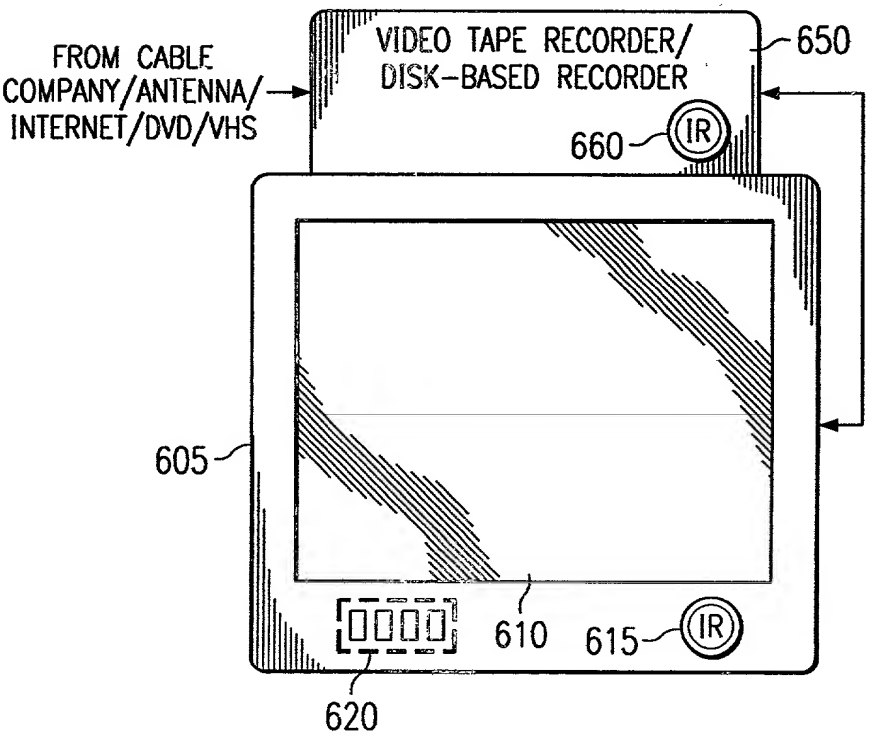


FIG. 7

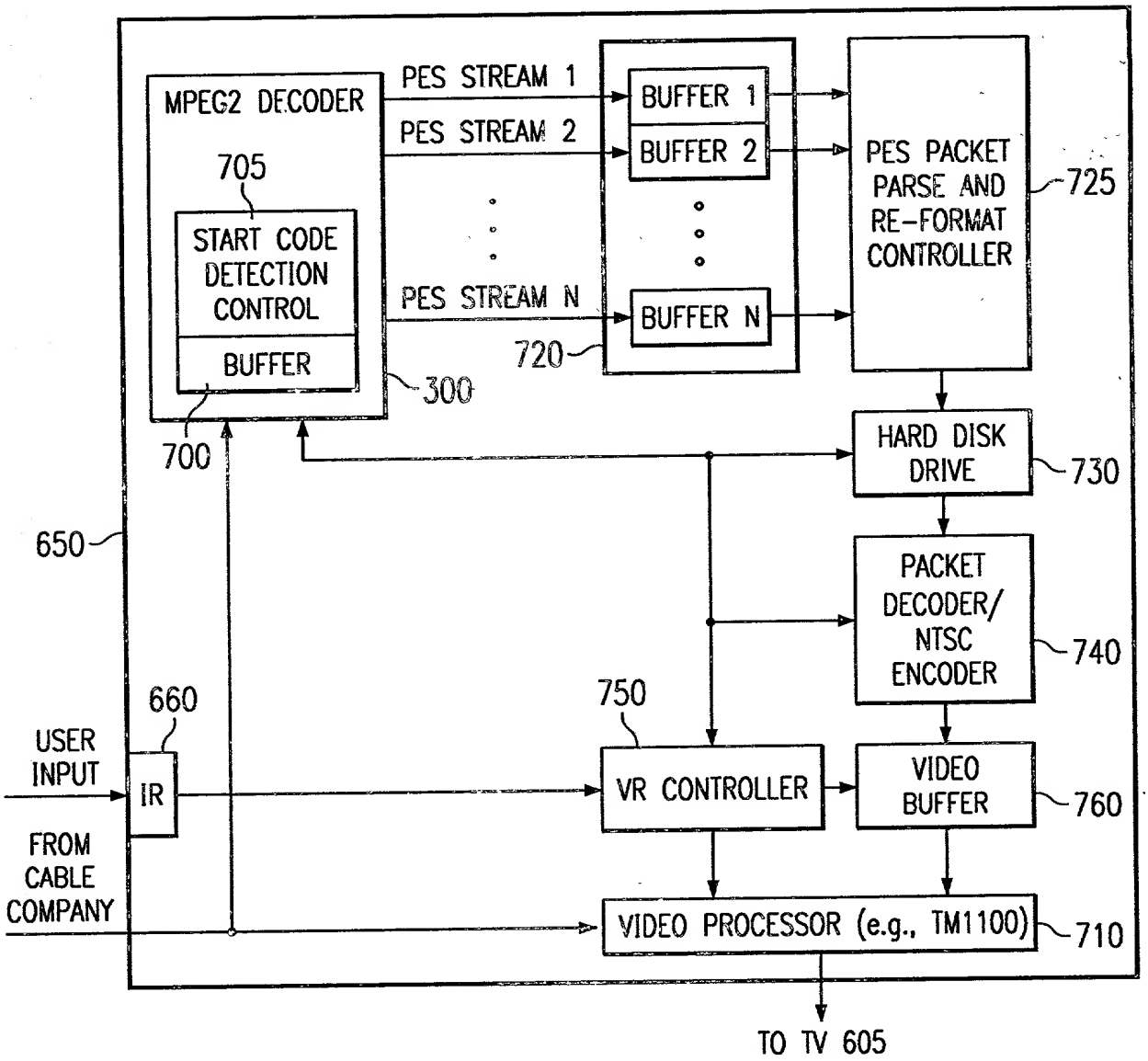
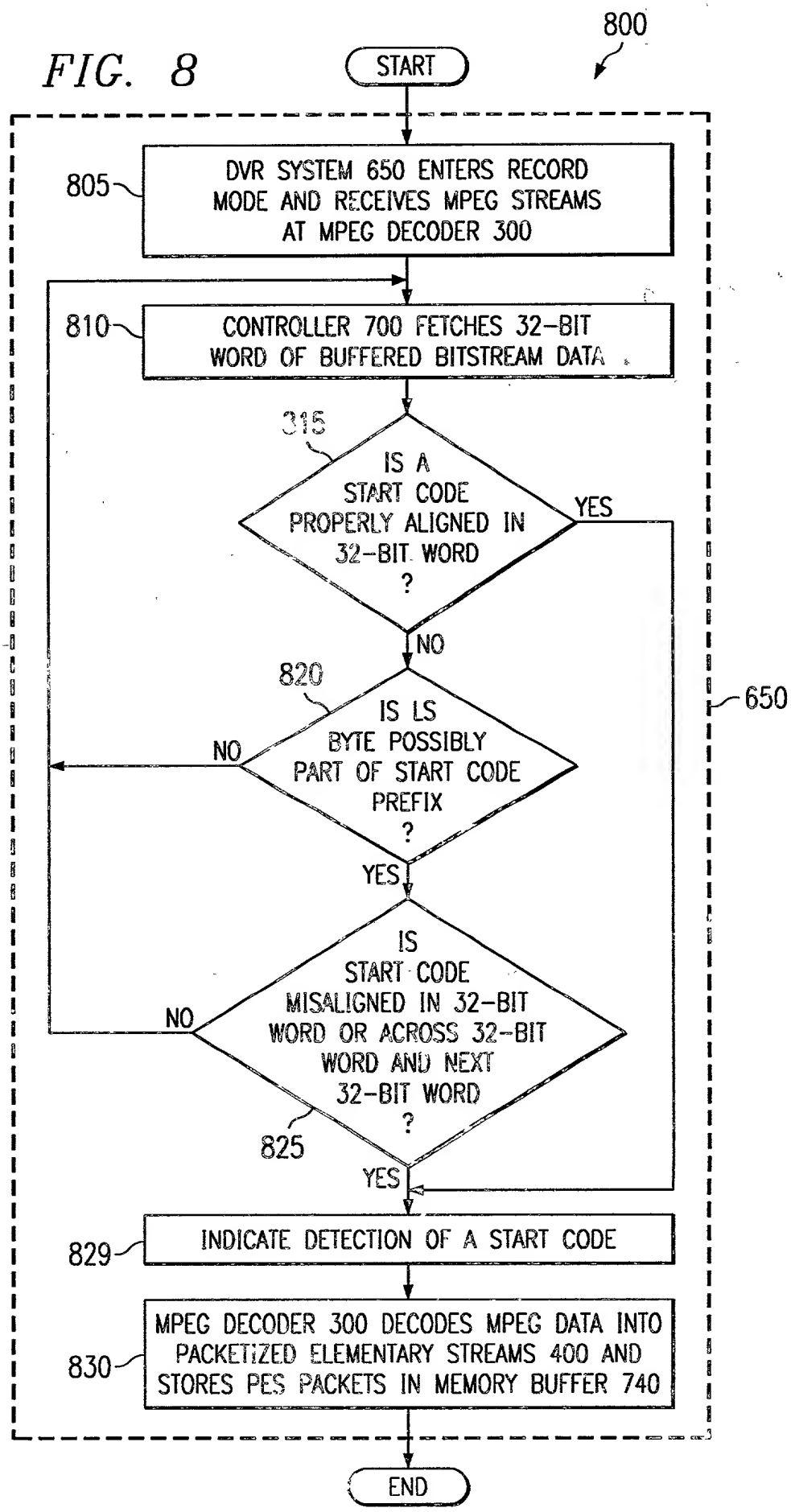

MPEG2 DECODER
705
START CODE DETECTION CONTROL
BUFFER
300
700
PES STREAM 1
PES STREAM 2
PES STREAM N
BUFFER 1
BUFFER 2
BUFFER N
720
PES PACKET PARSE AND RE-FORMAT CONTROLLER
725
HARD DISK DRIVE
730
PACKET DECODER/ NTSC ENCODER
740
650
660
USER INPUT
IR
FROM CABLE COMPANY
750
VR CONTROLLER
VIDEO BUFFER
760
VIDEO PROCESSOR (e.g., TM1100)
710
TO TV 605

FIG. 8


800
START
805
DVR SYSTEM 650 ENTERS RECORD MODE AND RECEIVES MPEG STREAMS AT MPEG DECODER 300
810
CONTROLLER 700 FETCHES 32-BIT WORD OF BUFFERED BITSTREAM DATA
315
IS A START CODE PROPERLY ALIGNED IN 32-BIT WORD ?
YES
NO
820
IS LS BYTE POSSIBLY PART OF START CODE PREFIX ?
NO
YES
IS START CODE MISALIGNED IN 32-BIT WORD OR ACROSS 32-BIT WORD AND NEXT 32-BIT WORD ?
NO
825
YES
650
829
INDICATE DETECTION OF A START CODE
830
MPEG DECODER 300 DECODES MPEG DATA INTO PACKETIZED ELEMENTARY STREAMS 400 AND STORES PES PACKETS IN MEMORY BUFFER 740
END